# 381 Series Owner's Guide

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

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# What is included

- 7-Channel Receiver
- A pair of four-button transmitters
- A Stinger® DoubleGuard® dual-output shock sensor
- The Revenger® Soft Chirp® six-tone programmable siren
- The red Status LED indicator light
- A push-button Valet® switch
- Your warranty card
- FailSafe® Starter Kill ready circuitry (may require additional labor).

**CONGRATULATIONS** on your purchase of a state-of-the-art vehicle security system. This system has been designed to provide years of trouble-free operation. Due to the complexity of this system, it must be installed by an authorized dealer only. Installation of this product by any other person other than an authorized dealer voids the warranty. All dealers are provided with a preprinted dealer certificate to verify that they are authorized.

THE SYSTEM REQUIRES NO SPECIFIC MAINTENANCE. Your remote control is powered by a miniature 12V battery, type GP23A, that will last about a year under normal use. When the battery weakens, operating range will be reduced and the LED on the remote will light dim.

Your Warranty card must be returned and the bar code serial number must not be removed. If the warranty card is not returned you don't have a warranty. It is also necessary to keep your proof of purchase which reflects that the product was installed by an authorized dealer. Make sure you receive the warranty card from your dealer.

**This owner's guide** should help you to get the most out of your system. Please take the time to read it thoroughly, prior to using the system.

# **Transmitter Channels**

The receiver uses a computer-based Learn Routine<sup>™</sup> to learn the transmitter buttons. This makes it possible to assign any button on the remote to any receiver function. Two of the possible transmitter configurations are illustrated below.

# **Standard Configuration**

The standard configuration is how the transmitters come programmed initially. If you would like a custom configuration, see your dealer.



### Arm/Disarm/Panic

The arm/disarm/panic functions are usually controlled by Button I.

### **Function 2**

The Silent Mode™, Remote Valet®, Trunk release functions are usually controlled by Button II. (Silent Mode and Remote Valet work by pressing Button II for less than one second. Trunk release requires you to press Button II for 1.5 seconds.)

#### **Functions 3-6**

These functions are assigned to transmitter buttons as shown in the diagram. They are provided to control any convenience or expansion options you wish to add to the system.

# Separate Arm/Disarm/Panic

A remote configured in this way will operate like many factory keyless entry remotes. This configuration makes it possible to arm the system with one transmitter button, disarm it with another, and activate Panic Mode with a third.



### **Function 2**

Silent Mode<sup>™</sup>, Remote Valet<sup>®</sup>, and trunk release are all controlled by function 2. In the diagram above, function 2 is assigned to transmitter Button IV. Silent Mode<sup>™</sup> and Remote Valet work by pressing Button IV for less than one second. Pressing Button IV for 1.5 will activate the trunk release function.

#### **Functions 3-6**

These functions can be assigned to combinations of transmitter buttons as needed. The functions are provided to control any convenience or expansion options you wish to add to the system.

# **Using Your System**

The button numbers used in the descriptions correspond to the standard configuration. Remember, this is not the only way your transmitter may be set up. It can be configured to meet your needs

#### Arming

You can activate, or **arm**, the system by pressing Button I of your transmitter for one second. When the system arms, you will hear a short siren sound, or **chirp**, and see the parking lights flash once. If the vehicle's power door locks have been connected to the system, the doors will lock.

While the system is armed, the Status LED will flash about twice a second, showing that the system is actively protecting your vehicle. If you hear a second chirp after arming and see the Status LED flashing in groups, see Diagnostics section. This extra chirp is called **Bypass Notification**.

The system also can be programmed to arm itself automatically (called **passive arming**). If the system is programmed for passive arming, it will automatically arm 30 seconds after the ignition is turned off and the system "sees" you leave the vehicle by opening and closing a door. Whenever the system is in its 30-second passive-arming countdown, the Status LED will flash twice as fast as it does when the system is armed. The siren will chirp one time 20 seconds after the last door has been closed. The system is not actually armed at that point. The system arms and the doors lock (if connected and programmed for passive locking) at the 30 second mark, but the siren will not chirp. The early chirp provides you with a 10-second warning prior to arming.

NOTE: If any protected entry point (such as a door or a switch-protected trunk or hood) is open, the system will not passively arm (unless forced passive arming is programmed on. See Programming Options section). Additionally, each time a sensor is triggered during the arming countdown, the 30-second countdown starts over.

### When armed, your vehicle is protected as follows:

- Light impacts will trigger the Warn Away® signal. When triggered, the siren will
  chirp and the parking lights will flash for a few seconds.
- Heavy impacts will trigger the programmed triggered sequence.
- If a door is opened, the system will immediately start chirping the siren and
  flashing the parking lights. Three seconds later, the siren output changes to
  a continuous blast. This **progressive** response gives you time to disarm the
  system with your transmitter if you inadvertently open the door while the
  system is armed, while still providing instant response (even if the door is
  immediately closed).
- Turning on the ignition key will trip the same two-stage response as opening a door.
- The optional **starter kill** prevents the vehicle's starter from cranking.

# **Arming While Driving**

Your system can be armed while driving the vehicle! Simply press Button I on your transmitter for 1.5 seconds while the vehicle is running, or the ignition is on. The system will chirp once and then once more to indicate that the ignition is on. The system will not respond to any input except the door triggers and the starter kill relay (if installed) will not be activated. The system will disarm automatically when the ignition is turned off. The siren will chirp twice and the LED will stop flashing.

### **Disarming**

To disarm the system, press Button I again. You will hear two chirps, and the parking lights will flash twice. If power locks are connected to the system, the doors will unlock. If the siren chirps either four or five times when disarming, see Diagnostics section. This is called **Tamper Alert**.

### **High Security Disarm**

This system proudly offers High Security Disarm. High Security Disarm is a feature that makes it possible to silence and reset the system when it is triggering without disarming the system. If the system is triggered, and the siren has been sounding for longer than six seconds, pressing the disarm button on the transmitter will stop the trigger and return the unit to the armed state. The system will not disarm, but rather reset. This prevents you from disabling the system should you wish to disarm it without visually checking the vehicle. Pressing the disarm button again, after resetting the system, will disarm the system. Pressing the disarm button on the transmitter during the first six seconds of the triggered sequence will disarm the system immediately. The six second timer is provided for your convenience should you trigger the system by mistake.

# **Disarming Without a Transmitter**

This feature allows you to disarm the system without the transmitter should it be lost, damaged or disabled. In order to disarm without a transmitter, you must have the vehicle's ignition key and know where the Valet button is. Be sure to check with the installer for the location of the Valet button.



Turn ignition to "on" position. Push the Valet switch within 15 seconds. The system should now disarm. If it does not, you may have waited too long, so turn the ignition off and on and try again.



IMPORTANT! The Valet switch will not disarm the optional VRS® feature. The hidden VRS arm/disarm switch must be used (see VRS section.).

It is also possible to disarm the system using the Ghost Switch. Please see the Ghost Switch $^{\text{TM}}$  section of this guide.

#### Ghost Switch™

The Ghost Switch<sup>™</sup> is not a switch at all. It is a factory switch already in your vehicle that will function as a protected disarm switch. Any factory switch in your vehicle may be used, as long as it switches positive voltage. Your installer can help you to determine what switches will work in your vehicle. Some ideas are power window, radio turn-on, or defroster switches.

Once a switch has been selected, you may choose the number of pulses that must be applied to the wire to disarm the system, from 1-5. After programming is complete, the Ghost Switch will become a disarm switch for both the security system and optional VRS.

NOTE: The Valet® switch and VRS button still retain their disarm capability unless the system is programmed to Ghost Switch Only disarm mode. See Programming Options for more details.

### To use the Ghost Switch™ to disarm the system without a transmitter:

Turn on the ignition. Operate the ghost switch the number of times you have selected. After one second the system will disarm. If the Ghost Switch is operated the incorrect number of times, you will have to turn the ignition off and repeat the above procedure. If you have not selected the pulse count, the default count is two pulses.

NOTE: Connection of the Ghost Switch may require extra labor. See the dealer for details.

#### Silent Mode<sup>™</sup>

To temporarily turn off the arm or disarm chirps, use **Silent Mode**<sup>™</sup>. Simply press Button II briefly before arming or disarming, and the confirmation chirp(s) will be eliminated for that one operation only. If you want the arm/disarm chirps turned off permanently, your dealer can do this for you.

NOTE: The Warn Away® response to lighter impacts is bypassed if the system is armed using Silent Mode. This ensures that no chirps will be emitted by the siren in an area you want chirp-free. The system is still fully able to trigger. Only the Warn Away response is defeated.

### Panic Mode

If you are threatened in or near your vehicle, you can attract attention by triggering the system with your transmitter! Just press Button I for 1.5 seconds, and you will enter **Panic Mode**. The siren will sound and the parking lights will flash for 30 seconds. To stop Panic Mode at any time, press Button I on the transmitter again.

#### Valet® Mode

You can prevent your system from automatically arming and triggering by using Valet® Mode. This is very useful when washing the vehicle or having it serviced. In Valet Mode, the system will not arm, even with the transmitter, but all convenience functions (door locks, trunk release, etc.) will work normally.

#### To enter or exit Valet® Mode with the Valet switch



Turn ignition to "on" position, then turn to "off" position. Press and release the Valet switch within 10 seconds. The Status LED will light solid if you are entering Valet Mode, and it will go out if you are exiting Valet Mode.



#### Remote Valet®

The operations described in this section refer to transmitter buttons. The buttons numbers used in the descriptions correspond to the standard configuration. Remember, this may not be how your transmitter is set up.

Open any door. Press Button I (or the arm/disarm button), Press Button II (or the function 2 button), Press Button I again.

The Status LED will light solid if you are entering Valet Mode, and it will go out if you are exiting Valet Mode.

### **Nuisance Prevention® Circuitry**

Your system has DEI®'s Nuisance Prevention® Circuitry (NPC®). It prevents annoying repetitive trigger sequences due to faulty door pin switches or environmental conditions such as thunder, jackhammers, airport noise, etc. Here's how it works:

The alarm triggers three times. Each time, the same sensor or switch is triggering the alarm. The three triggers are within 60 minutes of each other. NPC will interpret this pattern of triggers as false alarms. After the third trigger, NPC ignores, or bypasses, that sensor or switch (along with any other sensors or switches sharing the same zone) for 60 minutes.

If the bypassed sensor tries to trigger the system while it is being bypassed, the 60-minute bypass period will start over. This ensures that a sensor that continuously triggers will remain bypassed.

Doors are covered by NPC differently: If the alarm is triggered by an open door for three full cycles (one-and-one-half minutes), the doors will be bypassed until the trigger ceases.

NOTE: Arming and disarming the system does not reset this function! The only ways to reset a bypassed zone are for it to not trigger for 60 minutes, or to turn on the ignition. If testing your system, it is important to remember that the NPC programming can cause zones to be bypassed and appear to stop working. If five chirps are heard when disarming, NPC has been engaged. If you wish to clear the NPC memory, turn the ignition key on.

NPC is programmable. See "Programming Options" section of this guide.

# **Diagnostics**

The microprocessor at the heart of your system is constantly monitoring all of the switches and sensors connected to it. It detects any faulty switches and sensors and prevents them from disabling the entire system. The microprocessor will also record and report any triggers that occurred during your absence.

### **Arming Diagnostics**

If the system is armed with an input active (door open, sensor triggering, etc.) the unit will chirp once when arming and then one more time a few seconds later. This is called **Bypass Notification**.

Note: Bypass notification will not occur when using Silent Mode™ or if chirps have been programmed OFF.

The system will ignore the input that was active when it was armed until it goes away. Three seconds later it will monitor that input normally. For example, if your car has interior light exit delay, and you arm the system before the interior light goes out, you may get Bypass Notification. Once the light goes out, however, the doors are monitored normally.

### **Disarming Diagnostics**

Extra disarm chirps are the **Tamper Alert**. If four chirps are heard when disarming, the system was triggered in your absence. If five chirps are heard, a zone was triggered so many times that Nuisance Prevention Circuitry  $^{\text{TM}}$  has bypassed that zone. In either case, the Status LED will indicate which zone was involved (see Table of Zones section). The system will retain this information in its memory, and chirp four or five times each time it is disarmed, until the next time the ignition key is turned on.

# **Table of Zones**

The **zone number** is the number of LED flashes used by the system to identify that input. The standard input assignments are listed below, along with spaces to write in any optional sensors or switches you have had installed.

Zone # of LED Flashes	Description	Dealer Installed Options		
1	Instant–Often used for hood/trunk pin switches			
2	Instant trigger–a heavier impact detected by the DoubleGuard® Shock Sensor			
3	Door switch trigger			
4	Instant trigger–for optional sensors			
5	Warn Away trigger–a lighter impact detected by the DoubleGuard® Shock Sensor			
6	Warn Away trigger for optional sensor			
7	Panic mode activated			
8	Ignition trigger			

NOTE: Zones 5 and 6 report to the LED when the system is disarmed. However, they are not reported by disarming diagnostics of the siren.

# Code Hopping<sup>™</sup> Explained

The receiver and transmitters each use a mathematical formula called an algorithm to change their code each time the transmitter is used. This technology has been developed to increase the security of the unit. The control unit knows what the next codes should be. This helps to keep the transmitter "in sync" with the control unit even if you use the remote control out of range of the vehicle. However, if the transmitter has been pressed many times out of range of the vehicle, or the battery has been removed, it may get out of sync with the control unit and fail to operate the system. To re-sync the remote control simply press the arm/disarm button of the remote control several times within range of the vehicle. The alarm will automatically re-sync and respond to the transmitters normally.

# **High Frequency**

Your system transmits and receives at 434 MHz. This provides a cleaner spectrum with less interference and a more stable signal. Enjoy a phenomenal increase in range - even in areas with high radio interference.

# **Owner Recognition**

Owner Recognition is a revolutionary new feature available only from DEI®. Using a personal computer, your dealer can program many of the system settings. The computer makes it possible to program different settings for each transmitter that is used with the system. Then, whenever a specific transmitter is used, the system will recall the settings assigned to that transmitter. Owner Recognition lets up to four users of the system have different settings that meet their specific needs. It is almost like having four separate alarms in your vehicle, one for each user.

NOTE: Owner Recognition cannot be programmed without a personal computer and the necessary software. Check with your dealer for more information.

# Rapid Resume Logic

This DEI security system is equipped with circuitry that will allow the unit to remember it's alarm state if power is lost and then reconnected. If a potential thief disconnects the battery in an attempt to disable the alarm and then reconnects it, the security system will power up in the same state it was when power was lost. For example, if power is disconnected during it's full trigger sequence, when power is reconnected to the unit it will remain in the full trigger sequence. If power is disconnected when the unit is disarmed, it will power back up disarmed. This also applies to the VRS sequence. If the unit loses power at any time during the VRS sequence, when the unit is powered back up it will automatically go to the VRS full trigger sequence.

# **Programming Options**

Programming options control what your system does during normal operation, and require little or no additional parts. However, some may require additional installation labor.

The following is a list of the program settings, with the factory settings in **Bold**.

- Active arming (only with the transmitter) or passive arming (automatic arming 30-seconds after the last door has been closed).
- Arming\disarming confirmation siren chirps on or off.
- Passive door locking (with passive arming) or **active** door locking (only when arming with the transmitter). This feature only works if passive arming has been turned on.
- The ignition controlled door lock feature on or off: With this feature on, the doors will lock 3-seconds after the ignition is turned on, and unlock when the ignition is turned off. The system can also be programmed to prevent the door from locking when the ignition is turned on with any door open. If your installer is programming the system with a personal computer and the TechSoft Programmer, ignition lock and ignition unlock are independent features and can be programmed separately.

- Panic mode enabled/disabled with the ignition on: Some states have laws against siren capability in a moving vehicle.
- Automatic Engine Disable (AED) on or off: The purpose of the feature is to protect the vehicle from being stolen at all times, regardless of whether or not the alarm is armed. If AED is programmed on, the starter of the vehicle will be disabled 30 seconds after the ignition is turned off. Once the key is turned off, the LED will flash slowly (one-half its normal armed rate) to indicate the AED arming cycle. Thirty seconds later, the starter of the vehicle will be disabled. To start the car, it will be necessary to arm the car with the remote and then disarm it with the remote. It is also possible to disarm the AED feature by turning the ignition key to the "run" position and pressing the Valet® button once. AED is disabled when the system is in Valet® mode.

NOTE: This feature will only function if the FailSafe® Starter Kill relay has been installed.

 Forced passive arming on or off: If your system is programmed for passive arming and the forced passive arming feature has been programmed on, the system will passively arm after one hour, even if a protected entry has been left open. This feature is useful if a door has accidentally been left ajar when leaving the vehicle. Forced passive arming ensures that the system will be armed in every situation.

NOTE: When the system passively arms after one hour, the entry point that has been left open, and anything connected to the same zone, is bypassed and cannot trigger the system. However, the remaining inputs to the system are fully operational.

- Full trigger response 30 or 60 seconds: This determines how long the full
  triggered sequence lasts. Some states have laws regulating how long a
  security system can sound before it is considered a nuisance. If your installer
  is programming the system with a personal computer and the TechSoft
  Programmer, the full triggered response can be programmed for any duration
  from 1 to 180 seconds.
- Nuisance Prevention Circuitry® on or off: Please refer to the NPC section of this
  manual for a complete explanation of how NPC operates. If NPC is programmed
  off, the security system will respond to inputs from any sensor indefinitely.

NOTE: As many states have laws regulating security systems, programming NPC off may allow your system to violate state laws.

- Progressive door trigger on or off: When the system is armed and a door is opened, the system responds with ten chirps prior to beginning the full triggered sequence. If an instant trigger is desired, progressive door trigger can be programmed off.
- Standard or Ghost Switch™ Only disarm mode: In standard disarm mode, the
  Valet switch and the VRS® switch work in conjunction with the Ghost Switch
  as disarm commands. To enhance security, Ghost Switch Only may be
  selected. When selected, the Valet and VRS® buttons will no longer disarm
  the system. The only way you can disarm your system (without a transmitter)
  is using the Ghost Switch.
- Siren tones and chirp volume: The output of the Revenger® Soft-Chirp® siren
  consists of six different tones in sequence. Any of these tones can be eliminated
  by your dealer, resulting in a unique, easily identifiable siren sound. The siren
  chirps can be either full volume or 6 decibels quieter than the full alarm blast.

# **Installation Options**

The system has many options that may require extra parts and labor. Some of the possibilities are listed here.

- Progressive unlocking: In most cars with electric power door locks, the system
  can be configured so that when the system is disarmed, only the driver's door
  unlocks. A second press of the disarm button within 15 seconds of disarming
  unlocks the other doors.
- Delayed Accessory Output (DAO): The system provides an output whenever the ignition is turned off. This output can be used to keep the radio or power windows on when the ignition is turned off. Opening and closing a door automatically turns the output off.
- Vehicle Recovery System® (VRS): VRS is an anti-carjacking device designed to help in the safe recovery of your vehicle should you be carjacked. Please refer to the Vehicle Recovery System section of this manual below for a complete explanation of how the Vehicle Recovery System operates.

• Stereo or sensor on/off: The system provides outputs that can be used to turn your stereo or a sensor on and off via the remote transmitter.

# Vehicle Recovery System® (VRS)

The optional Vehicle Recovery System feature is designed to ensure that any unauthorized user of your vehicle (even if using your keys and remote control) will not be able to permanently separate you from your vehicle.

The VRS feature cannot prevent a carjacking attempt, however, it does ensure that if your vehicle is taken by an unauthorized user, it will be disabled (after several progressive warnings) as safely as possible. Should a carjacking occur, the VRS allows you to concern yourself with your personal safety without worrying about your property.

DEI® has engineered this vehicle security system, the FailSafe® Starter Kill, and the VRS® feature to provide the best combination of personal safety and property protection available. When properly installed, the system can never inadvertently stop your vehicle in traffic, on railroad tracks, etc., unlike any system that shuts down your engine while it is running. This system is designed to perform starter interrupt, or starter kill. The FailSafe Starter Kill cannot shut down an already-running engine, it can only prevent an engine from starting in the first place.

Any installation which allows this product to shut down a vehicle's engine as it is running is contrary to the product's design and intended usage, and DEI® hereby expressly disclaims any liability resulting therefrom.

The optional Vehicle Recovery System is armed and disarmed using a hidden push button switch. If the system has been installed, make sure you are aware of the location of the VRS button.

### **Arming The VRS®**

To arm the VRS, push the VRS button once. This can be done before driving or while driving the vehicle. Once the system is armed, it will go into its triggered sequence (see below) if any door is opened and closed. If you are forced from the vehicle the system will trigger as the door will be opened and closed as you leave the vehicle. This is how the system works to combat intersection carjacking. If ordered from the vehicle, you may press the VRS button before exiting. Arming prior to that point, however, is highly recommended. To protect against parking lot carjacking, simply press the VRS button once before leaving the vehicle. The system will now trigger automatically the next time you or anyone drives the vehicle. This helps to protect the vehicle if someone takes your keys and alarm remote by force in a parking lot.

NOTE: If the system is armed while driving and not disarmed prior to leaving the vehicle, it is still armed and will trigger the next time the vehicle is driven.

# **VRS® Triggered Sequence**

Fifteen seconds after the last door has closed, the system's Status LED will begin flashing. This delay is to allow you to put distance between yourself and your vehicle in the event of a carjacking.



Forty-five seconds later, the Soft Chirp® Revenger® siren will begin chirping and the parking lights will begin flashing. This time could be used to notify authorities that your vehicle has been hijacked, and tell them what the VRS will do next.



Fifteen seconds after the siren chirps begin, the sirens output will change to a continuous blast.

From this point on, when the ignition key is turned off, the VRS will immediately turn on the FailSafe starter kill. This will prevent the vehicle from being restarted, thus immobilizing it at that spot.

Three minutes after the constant siren output begins, the flashing parking lights and the siren will stop. The starter kill will remain active until the system is disarmed. If the door is opened or the ignition is turned off and on in an attempt to restart the car, the siren and light flashing will begin again.

### Disarming the VRS®

Take the time to familiarize yourself with the VRS triggering sequence and the disarm procedure. It is important to recognize the VRS and know how to disarm it in case of accidental activation.

Remember, neither the transmitter nor the Valet® button will disarm the VRS® feature. Only the hidden arm/disarm button, or the Ghost Switch, can disarm the VRS®.

Regardless of whether or not VRS is triggering, the procedure used to disarm VRS remains the same.

Once again, if VRS is armed, it does not disarm automatically. You must disarm it the next time you operate the vehicle. You must manually disarm it following this procedure:



Turn the ignition key on. If you are driving the vehicle, skip this step. Press and release the hidden VRS button, or operate the Ghost Switch the proper number of times. Pressing the disarm button of the transmitter will not disarm VRS, nor will the Valet

button. You must use either the VRS button or the Ghost Switch to disarm VRS.

Remember, neither the transmitter nor the Valet button will disarm the VRS feature. Only the hidden arm/disarm button, or the Ghost Switch, can disarm VRS.

#### LED confirmation of the VRS® state

The system will report the VRS state to the dash mounted LED. To check the state of the VRS system, simply press and hold the VRS® button. After two seconds, the LED will flash in groups. Groups of one indicate that VRS is armed, while groups of two indicate that the VRS is disarmed.

Pressing and holding the VRS button does not cause VRS to change state. Only pressing the VRS button for less than one second will arm or disarm VRS.

For example, to arm VRS and then confirm that on the LED:



- 1. Press and release the VRS button.
- 2. Press and hold the VRS button.
- 3. The LED will flash in groups of one to confirm arming of the VRS.



# Glossary of Terms

- **Control Unit** The "brain" of your system. Usually hidden underneath the dash area of the vehicle. It houses the microprocessor which monitors your vehicle and controls all of the alarms functions.
- FailSafe® Starter Kill An automatic switch controlled by the security system which prevents the vehicle's starter from cranking whenever the system is armed. The vehicle is never prevented from cranking when the system is disarmed, in Valet® mode, or should the starter kill switch itself fail. Your system is ready for this feature, however installation of this feature may require additional labor.
- Input A physical connection to the system. An input can be provided by a sensor, pinswitch or to existing systems in the vehicle, such as ignition or courtesy lights.
- **LED** Red light mounted somewhere in the vehicle. It is used to indicate the status of your system. It is also used to report triggers and faults in the system or sensors.
- **Shock Sensor** This system is packaged with a DoubleGuard® Shock Sensor. This sensor is mounted in the vehicle and designed to pick up impacts to the vehicle or glass.
- **Siren** Noise generating device usually installed in the engine compartment of the vehicle. It is responsible for generating the "chirps" you hear, as well as the six tones you hear while the alarm is triggered.
- **Transmitter** Hand-held, remote control which operates the various system functions
- **Trigger or Triggered Sequence** This is what happens when the alarm "goes off" or "trips." The triggered response of your system consists of 30 seconds of siren sounding and parking light flashing.
- **Valet**® Switch A small push button switch mounted somewhere inside the vehicle. It is used to override the alarm when a transmitter is lost or damaged, or to put it into Valet® mode.

**Warn Away®** Response Lighter impacts to the vehicle will generate the Warn Away response. It consists of several seconds of siren chirps and parking light flashes.

**Zone** A zone is a separate input that the alarm can recognize as unique. Each input to the system is connected to a particular zone. Often two or more inputs may share the same zone.

# Security & Convenience Expansions

Here we have listed only some of the many expansion options available. Please consult your dealer for a complete explanation of all the options available to you.

**Field Disturbance Sensor:** An invisible dome of coverage is established by the 508T "radar" sensor. Your system can react to any intrusions into this field with the triggered sequence.

**Backup Battery:** The 520T keeps the system armed, triggers the alarm and keeps the starter kill active if main battery power is disconnected.

**Electronic Hood Lock**: This prevents the vehicle's hood from being opened whenever the system is in alarm mode, keeping thieves away from the system's siren, the battery connections, or other components under the hood.

**Audio Sensor:** Metal on glass, glass cracking, or breaking glass produce distinctive acoustic signatures. The 506T and audio sensor uses a microphone to pick up sounds, and then analyze them with proprietary acoustic software to determine if the glass has been struck.

Power Trunk Release: The channel 2 output of the system can operate a factory power release for the vehicle's trunk or hatch. (An optional relay may be required.) If the factory release is not power activated, the DEI's 522T trunk release solenoid can often be added.

Valet® Start System: For the ultimate in convenience, the Valet® start system can start your vehicle, monitor engine functions, and power your climate control system with a push of a button! Over-rev protection, open-hood lockout, brake pedal shutoff, and automatic timer shutoff are all included. (Only for automatic transmission, fuel-injected gasoline vehicles).

**Power Window Control:** Automatic power window control is provided with the 529T or 530T systems. These can operate power windows, and can roll them up automatically when the system is armed, down when you transmit channel 2 or 3, or both up and down. The 530T also provides one touch switch operation.

**Headlight and Parking Light Automation:** The 545T Nite-Lite® will automatically turn on your parking and head lights when it gets dark. In addition, the 545T will make sure your headlights are on whenever the windshield wipers are used. A transmitter function can also be used to turn on your parking and head lights for a programmed time.

**Voice Module:** The 516M high quality voice module will announce with a voice many of the system functions including arm, disarm, Warn Away<sup>™</sup> and channel activation.

Notes			
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### QUICK REFERENCE OPERATING CARD:

#### To arm using your remote

▼ You can activate, or arm, the system by pressing Button I of your transmitter for one second. When the system arms, you will hear a short siren sound, or chirp, and see the parking lights flash once. If the vehicle's power door locks have been connected to the system, the doors will lock.

# To disarm using your remote

▼ To disarm the system, press Button I again. You will hear two chirps, and the parking lights will flash twice. If power locks are connected to the system, the doors will unlock. If the siren chirps either four or five times when disarming, see Diagnostics section. This is called Tamper Alert.

### **Arming While Driving**

Press Button I on your transmitter while the vehicle is running. The system will chirp once and then once more to indicate that the ignition is on.

### **Disarming Without a Transmitter**

▼ Turn on the ignition. Push the Valet® switch within 15 seconds. The system should now disarm. If it does not, you may have waited too long, so turn the ignition off and on and try again.

#### To enter or exit Valet® Mode

▼ Turn ignition to "run" position, then turn to "off" position. Press and release the Valet® switch within 10 seconds. The Status LED will light solid if you are entering Valet® Mode, and it will go out if you are exiting Valet® Mode.

#### To activate panic mode

▼ Hold Button I down for 1.5 seconds.

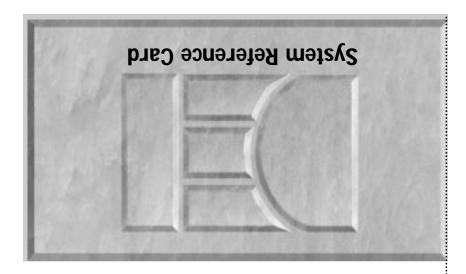
#### To exit panic mode

▼ Press Button II on the transmitter.

#### To activate Silent Mode™

▼ Press Button II briefly before arming or disarming, and the confirmation chirp(s) will be eliminated for that one operation only.

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Since its inception, the company known as Directed Electronics, Inc. (DEI®) has had one purpose—to bring the proven advantages of microprocessor and I.C. technology to the automotive industry.

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